Description of Firm Transmission Rights (FTRs) - Term Sheet [09/10/01]

The Proposal

A Firm (Physical) Transmission Right (FTR) gives its owner the right to inject 1MW in one zone and withdraw it from another zone for 1 hour. It is envisaged that such FTRs will be sold in strips,[1] for example an annual strip of 8760 FTRs gives its owner the right to inject 1MW in one zone and withdraw it another zone for every hour of the specified year. The terms and conditions that define the value of an FTR, or strip of FTRs, will be clearly defined in a Term Sheet with the goal to create a product that is sufficiently firm to be of value and clearly defined to make it easily tradable in the secondary market. Of primary importance to creating a valuable, tradable market instrument is its degree of firmness.

The concept of firmness will be modified by the Term Sheet's inclusion of a planned maintenance and service schedule for the year, which will include an allowance for some slippage and changes to these schedules. Participating Transmission Owners (PTOs) will submit these schedules to the RTO for approval for a year ahead with the ability to update the forecast as described in the 45-day outage coordination process. FTR holders will be responsible for covering the maintenance "holes" in their FTR rights. It is assumed that such "holes" will de-rate the FTR holders' rights, and in response, buyers of strips of FTRs will adjust their bid prices to reflect the number of hours that the transmission capacity will be reduced due to maintenance.

In addition to planned maintenance, there are other events that could have a direct impact on the value of an FTR after it has been issued. These include events typically covered under force majeure (e.g., unplanned maintenance) and those related to modifications in the commercial model (e.g., modifications in zones, flowpaths or thresholds). Rather than attempt to determine what constitutes force majeure and what is unplanned maintenance, the CMCG supports an approach where the rights holders would be insulated from all small and frequent changes in the commercial model long as:

1. The total cost of congestion is maintained below a reasonable "uplift cost cap" target as described in COM-2 (August 29, 2001).
2. Large extended outages trigger force majeure for all FTR owners.

[1] Blocks of FTRs will be sold, ranging from a single hour to 2-year strips.

Under this proposal the RTO would have the ability to invoke the force majeure clause in the term sheet to cover significant unplanned outages resulting from emergency events such as wildfires, ice storms or the like. The current proposal is to have a disinterested party (the RTO) designate a force majeure emergency. Essentially, when a declaration of Force Majeure is made the FTR holder bears the financial responsibility.

This treatment is in contrast to other outages that might result from a significant but not debilitating storm, accident or other event leading to "down time" on one or more flowpaths. This proposal socializes the costs of these smaller but more frequent events.

This proposal requires that the RTO socialize the costs of keeping the FTR firm for the majority of smaller and more frequent unplanned events. In this case, all unplanned outages would be handled by the RTO through its toolkit.[2] The FTR holder would operate as if there were no outage, and the cost to the RTO would be passed on to all participants through an uplift charge.

If the unplanned outage persists beyond some time threshold, then the RTO's operating procedures will shift these costs over to the transmission rights holder.[3] This allows the RTO to manage its Congestion Relief Costs and gives the transmission rights holders the right price signals to re-optimize the system.

In the event that the uplift charge exceeds the budget limits the RTO will have a number of tools with which to manage the costs. These tools can include:

i) Root cause analysis of forced outages,
ii) Establish and adjust RTO operating rules that govern the shifting of costs from the RTO (that takes the short-term responsibility) to the transmission rights holders (who take the longer-term responsibility).
iii) Judiciously use force majeure (which, by definition, lays the onus of system changes – due to emergency capacity reductions or constraints- on holders of FTRs) to maintain control of these costs.

[2] The toolkit includes both redispatch (incs and decs) and FTR buyback and purchase.
[3] The RTO may also consider relaxing the financial threshold for FTR owners who have had their rights de-rated due to force majeure.

Items Covered by the Term Sheet

TERM SHEET

- **Flowpath Specification**
  - Flowpath name/location
  - Rated capacity schedule (TTC, TRM, Existing Firm Contracts, ATC)
- **Transmission Right**
  - Size (MW)
  - Term (beginning and end date)
  - Direction of Flow
  - Class (level of firmness per flowgate)
  - Curtailment limits (reliability specifications)
- **Additional Rights Description**
  - If your rights go unused by _____, the RTO may issue recallable rights
  - If you exceed a threshold % ownership limit in ATC on any flowpath then you may be required to make a market.
  - Buyback Provisions at market price for rights or counter-flow
  - Exemptions for unpredictable events that will lead to de-rating of rights on a prorata basis for each flowpath.
  - Right to resell
- **Disclosures**
  - Planned outage schedule for next year on key and significant facilities that may exceed the commercial threshold.
  - Historical emergency actions
  - Flowpath/Rated Path Capacity history and planned additions
  - Definition of probable states of the Grid and the associated FDFs and flowpath path ratings.
- **Scheduled Actions**
  - Plans for future releases (month ahead, week ahead, day ahead)
  - Capacity ratings updates every month for 45 days in advance.
  - Date and time that Right will not be changed for planned or forced outages (4 hours before real time?)
  - Date to notify the RTO and TOs of a request to move or shorten planned maintenance schedule.
  - Within 1 week after the request to move or shorten schedule, TOs will provide cost estimates to RTO
  - RTO approves changes in planned maintenance schedules and provides cost estimates to rights holder.

The RTO's Role

In addition to the Term Sheet, the working group discussed and developed a consensus around some of the actions required of the RTO to create strips of FTRs. This discussion is embodied in Figure 1 below. The top half of Figure 1 reflects the agreement that there will be an auction by the RTO for long term FTRs (between 6 and 24 months) on commercially significant flowpaths (FTRC-2 rev3). As the PTOs update their information on a monthly basis, the RTO will issue incremental FTRs made available by this process. In addition to annual FTRs, rights for shorter periods will be sold on a seasonal, monthly, weekly and daily basis.

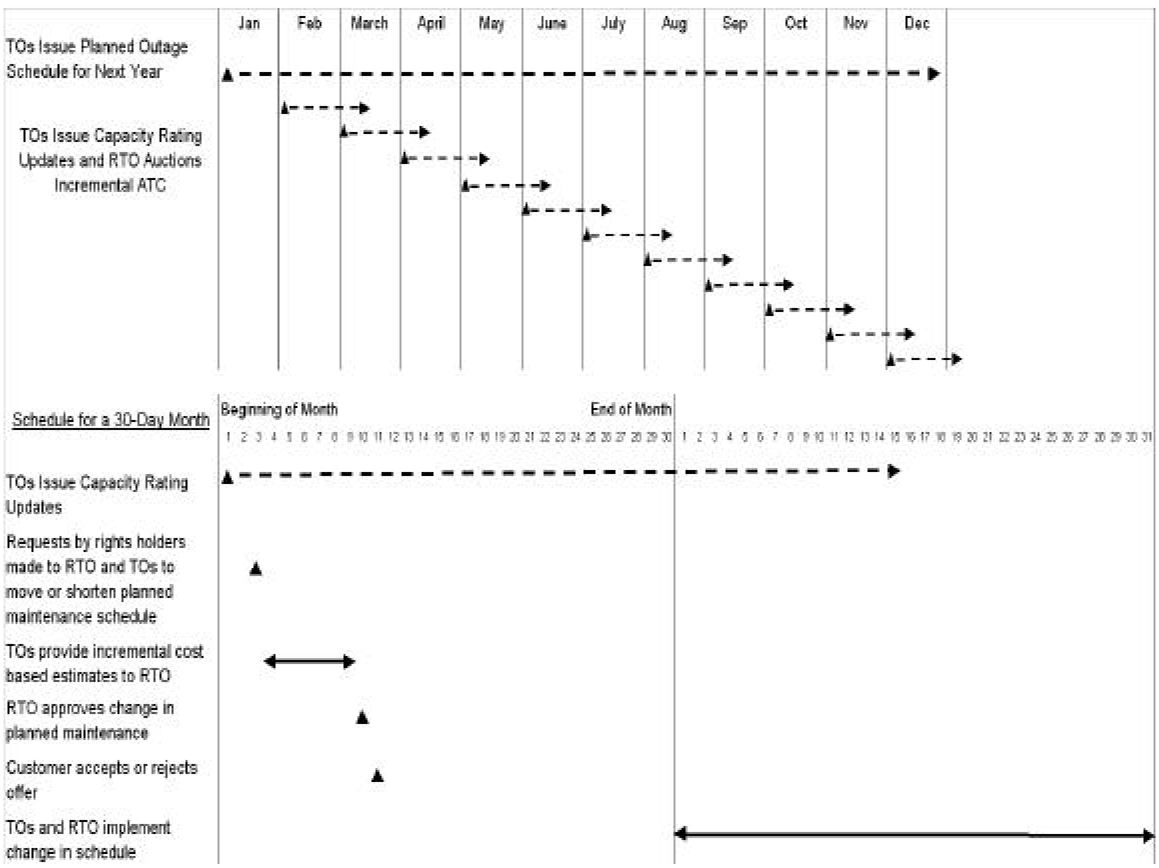

Figure 1: Maintenance Schedules and FTR Release

The bottom half of Figure 1 reflects a sub process that could occur within each of the monthly auctions. In this process, each of the existing rights holders could make a request of the PTO's to move or shorten their planned maintenance schedules. The PTO's would notify the rights holder of the cost of this action. If approved by the RTO, with consent received from the effected rights holder, the planned maintenance schedule could be modified as soon as practicable. Is it assumed in this discussion that any change to a planned outage schedule has been coordinated with the region outage coordinator (e.g., NW Power Pool Outage Coordination Process).

Planned Maintenance: Schedule Moves, Changes or Slippage

As noted, FTR rights will be offered with full disclosure of down periods from scheduled service and maintenance for large construction and rebuild projects. The content group agreed that that these projects are known at least a year ahead and should be included in the Term sheet prior to the annual auction. FTR holders will be responsible for these "holes" in their FTR rights. However, some amount of slippage and changes to these schedules is to be expected (see Figure 2).[4] In the short-term, the RTO will hold the FTR rights holder harmless from these changes, normally through purchasing the necessary FTR rights to ensure adequate capacity for holders or through the purchase of inc's and dec's to relieve congestion. These "nominal" costs of doing business will be socialized. If the slippage and schedule changes persist beyond some time threshold, then the RTO's operating procedures will shift these costs over to the transmission rights holder. This allows the RTO to manage its Congestion Relief Costs and gives the transmission rights holders the right price signals to re-optimize the system.

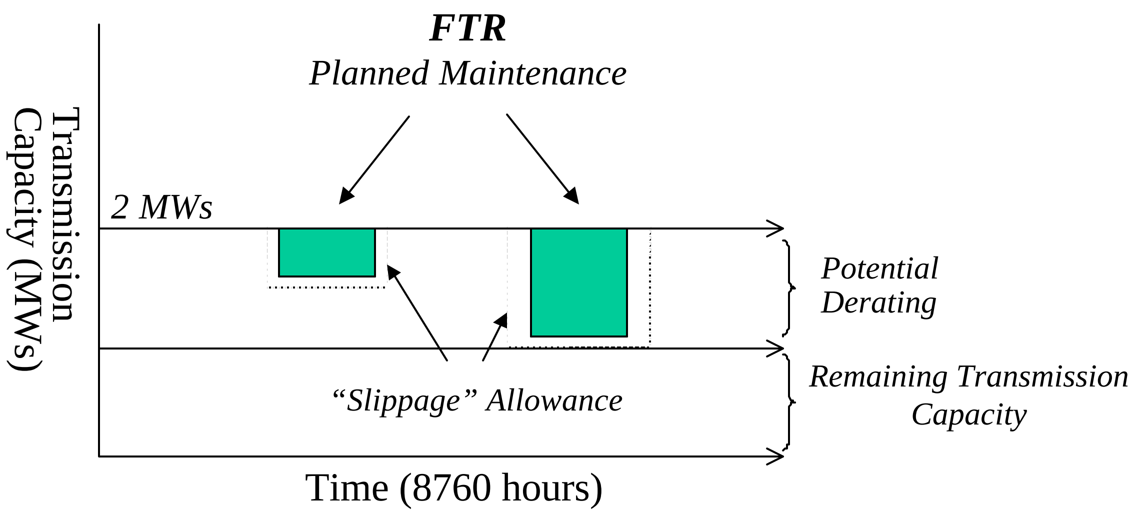

Figure 2: Slippage Allowance in Planned Maintenance Schedules

The RTO will be responsible for ensuring that the short-term costs of holding FTR holders harmless remain within reason. In the event that the uplift charge exceeds the budget limits the RTO will have a number of tools with which to manage the costs. These tools can include:

[4] The "slippage" is added to the actual long-term estimates of the planned maintenance and included in the term sheet estimates.

iv) Close monitoring of the construction projects and service and maintenance work.
v) Establish and adjust RTO operating rules that govern the shifting of costs from the RTO (that takes the short-term responsibility) to the transmission rights holders (who take the longer-term responsibility).
vi) Judiciously use force majeure (which, by definition, lays the onus of system changes – due to emergency capacity reductions or constraints- on holders of FTRs) to maintain control of these costs.

PTO's have no financial penalty associated with exceeding their obligations to comply with their planned maintenance schedules other than the loss of revenue from unavailable capacity and embarrassment for being late. Some PTOs, at their option, may guarantee the maintenance downtime is less than or equal to the schedule in the Term Sheet. For this guarantee, the Term Sheet will include the conditions and degree of compensation if the schedule is not met and the benefits that the PTO receives if the schedule is bettered, such as the right to sell any additional FTRs gained. Additionally, some PTOs may implement Performance Based Rates (PBRs) that may include a guarantee to the firmness of the FTRs.

Some rights holders may want a guarantee for the firmness of FTRs beyond what is available within the Term Sheet. These rights holders can use processes external to the RTO to procure insurance or some other financial mechanism to cover curtailment periods beyond what is documented within the Term Sheet.

Finally, a rights owner may request that the PTO move or shorten the maintenance schedule. The request would be made to the RTO, which would be forwarded to the PTO, who in turn would estimate the financial cost for the change. If agreement is reached on the proposed change, the rights owner would then be responsible for the financial consequences of the move.